

INTERNATIONAL SEARCH REPORT

International application No.
PCT/BR 2005/000005

A. CLASSIFICATION OF SUBJECT MATTER IPC ⁷ : B21D 28/28, B23K 26/00, B26F 1/31, E21B 43/08 According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) IPC ⁷ : B21D, B23K, B26F, E21B, B01D, B26D Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched _____ Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) epodoc, fi cl txtg, fi cl txtg, paj		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO2004/001186A1 (COLUMBIA ENGENHARIA LTDA) 31 December 2003 (31.12.2003) <i>the whole document.</i> --	1-4
A	US4343358A (GRYSKIEWICZ) 10 August 1982 (10.08.1982) <i>abstract, figures 1-5.</i> --	1-4
A	US5059256A (KANAPENAS et al.) 22 October 1991 (22.10.1991) <i>abstract, figures 1, 2.</i> --	1-4
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex.		
* Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family		
Date of the actual completion of the international search 10 May 2005 (10.05.2005)		Date of mailing of the international search report 31 May 2005 (31.05.2005)
Name and mailing address of the ISA/ AT Austrian Patent Office Dresdner Straße 87, A-1200 Vienna Facsimile No. +43 / 1 / 534 24 / 535		Authorized officer BABUREK G. Telephone No. +43 / 1 / 534 24 / 352

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP0432958A1 (THE BLACK CLAWSON COMPANY) 19 June 1991 (19.06.1991) <i>abstract, figures 1-9.</i> ---	1-4
A	US2003/0089495A1 (BIXENMANN) 15 May 2003 (15.05.2003) <i>abstract, figures 1-7.</i> ----	1-4

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Information on patent family members

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Patent document cited in search report			Publication date	Patent family member(s)			Publication date
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				WO	A1	9002628	1990-03-22
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